

REMARKS

The application is believed to be in condition for allowance.

Applicant appreciates the telephonic discussion held between the undersigned attorney and the Examiner having charge of this application. From that discussion, it is understood that the below discussed formal objections are based on the functional language of the rejection recitations. Put another way, it is not disputed that it is within the ordinary skill of the art to construct the recited elements. However, specific technical direction provided by the specification is discussed below.

Claims 1-2 and 5-9 are pending.

Claim 7 has been amended as discussed below.

112, first paragraph.

There are no substantive "art" rejections. The only rejections are as to Section 112, first and second paragraphs.

Claims 1-2 and 5-9 are rejected under Section 112, first paragraph, as failing to comply with the written description requirement in that the Official Action states that the claims contain subject matter not described in the specification in such a way as to reasonably convey that the inventor, at the time of the application was filed, had possession of the claimed invention.

The Official Action states that the specification lacks a written description of the following:

a) "means for determining whether a received signal is a download start control signal;"

b) "means for changing a state of the terminal from a first ordinary operation state to a second download state if the received signal is the download start control signal;" and

c) "means for transmitting a state switching notification signal to a sender of said download start control signal if the state of the terminal is changed to the download state;".

Under this rejection, the Official Action further states that it is unclear how to determine whether a received signal is a download start control signal; change a state of the terminal from a first ordinary operation state to a second download state if the received signal is the download start control signal; and/or transmit a state switching notification signal to a sender of said download start control signal if the state of the terminal is changed to the download state.

112, second paragraph.

Claims 1-2 and 5-9 are rejected under Section 112, second paragraph, as indefinite. The Official Action states that applicant has failed to particularly point out and distinctly claim the following:

a) "means for determining whether a received signal is a download start control signal;"

b) "means for changing a state of the terminal from a first ordinary operation state to a second download state if the received signal is the download start control signal;" and

c) "means for transmitting a state switching notification signal to a sender of said download start control signal if the state of the terminal is changed to the download state;".

Specifically as to claim 7, the Official Action objected to the omission of the term "for" between the terms "means" and "determining".

Claim 7 has been responsively amended. Withdrawal of the rejection as to the omission of the term "for" is solicited.  
Why the claims are proper under Section 112.

The specification shows that applicant had possession of the claimed invention at the time the application was filed and that the claims are definite.

To evaluate whether the subject matter of this recitation is adequately described in the specification so as to reasonably convey to one of skill that the inventor had possession of the claimed recitation and whether the claims are definite, one needs to consider what one of skill would have understood to have been disclosed, having read and understood the application as a whole.

The Abstract discloses that the invention allows rewriting the software or data of a terminal without a user or

maintenance personnel directly touching the terminal. The Abstract states that a center has a unit ***transmitting a download start control signal to the terminal***, and a unit transmitting to-be-downloaded software or data to the terminal when receiving a state switching notification signal from the terminal. The Abstract further states that the terminal has a unit determining whether a received signal is a download start control signal, a unit switching a state of the terminal to a download state if the received signal is the download start control signal, a unit transmitting the state switching notification signal to a sender of the download start control signal when the state of the terminal is changed to the download state, and a unit downloading the software or data after transmitting the download start switch notification signal.

Thus, the Abstract present a summary of the application disclosure pointing out certain features of the invention.

The three objected-to recitations a), b) and c) will be discussed in turn.

Recitation a)

Consider recitation a) as it appears in claim 1 "means for determining whether a received signal is a download start control signal;" and as it appears in claim 7 and is further detailed in the claim 1 "wherein" clause:

"means for determining whether a received signal is a download start control signal, the means determining whether a

received signal, from a signal source, is a download start control signal comprising

"a data registration memory storing data as a registered download start control signal,

"a receiving section that receives the received signal through a network, and

"a control section that i) compares the received signal with the registered download start control signal stored in the data registration memory, and ii) when the received signal is coincident with the registered download start control signal determines that the received signal is a download start control signal;".

As to recitation a), the Official Action (page 2, last paragraph) has asked how to "determine whether a received signal is a download start control signal".

In reading just the Abstract, one of skill would understand that the recited "received signal" is from that center that has a unit **transmitting a download start control signal to the terminal.**

The Background of the Invention section repeats that the present invention relates to a download system for downloading software or data from a center to a terminal. See also the Summary of the Invention section, especially page 2 first full paragraph, indicating a center transmitting a download start control signal to the terminal.

Attention is next directed to the Detailed Description of the Invention section beginning at specification page 3.

There is disclosed that the present invention automatically switches the state of a terminal from an ordinary operation state to a downloadable state by transmitting a download start control signal to the terminal.

Although this passage does not explicitly state that the download start control signal is from the center, this is implicit and one of skill would understand that the download start control signal is from the center. Further Figure 1 illustrates the radio base station 3 connected via a network to center 1, the radio base station 3 being shown in communication with terminal 4.

Figure 4 shows a block diagram of one terminal 4 and Figure 5 a block diagram of another terminal 7.

Page 4, lines 5 *et seq.* disclose that radio station 13 or line section 18 receives a signal from the center 1 through the network 2.

A radio section 13 or a line section 18 receives a signal from the center 1 through the network 2. Thus, receipt of the signal appears clearly disclosed and enabled.

A control section 14 compares the received signal with signals registered with the memory. ***If the signal from the center 1 is coincident with the download start control signal registered in advance,*** the terminal judges that the signal from

the center 1 is **a download start control signal**. Accordingly, the terminal starts software stored in the memory 16 for switching the state of the terminal to a download state.

One of skill would understand that "signals registered with the memory" discloses data representing a download start control signal having been stored in the memory 16 of the terminal.

Claim 7 follows this disclosure in reciting:

a data registration memory storing data as a registered download start control signal -- see memory 16 of Figures 4-5;

a receiving section that receives the received signal through a network -- see radio section 13 and line section 18; and

a control section that i) compares the received signal with the registered download start control signal stored in the data registration memory, and ii) when the received signal is coincident with the registered download start control signal determines that the received signal is a download start control signal; -- see operation section 15.

In view of this identified disclosure, it is clear that applicant has disclosed how to determine whether a received signal is a download start control signal, i.e., that applicant had possession of the claimed invention at the time of filing the application. It is also believed clear that the functional requirement of this recitation is clear, i.e., is definite under

112, second paragraph. Withdrawal of the rejections under 112, first and second paragraphs is solicited.

Recitation b)

Recitation b) is: b) "means for changing a state of the terminal from a first ordinary operation state to a second download state if the received signal is the download start control signal".

This recitation is believed definite in that the Detailed Description of the Invention section discloses that the invention provides a system for automatically switching the state of a terminal from an ordinary operation state to a downloadable state. It is disclosed (page 3 lines 10-17) that the terminal may be, e.g., a mobile radio terminal such as a PHS terminal or an ISDN terminal, or a PHS terminal. It is also disclosed that the download state relates to software, data or the like to be downloaded to the terminal.

One of skill would understand that these terminals have a normal operation state, e.g., the operation state where the terminal is fulfilling its normal purpose/function. One of skill would also understand that a downloadable state refers to a state where the terminal is set to a "download state" ready to download software, data, or the like.

The functional language would require that the terminal be changed from a first ordinary operation state to a second download state. The nature of each of these first and second



states is clear. The functional language include a condition "if" statement that causes the terminal to be changed from the first to the second state; that is, "if the received signal is the download start control signal".

Identifying how to determine if the received signal is the download start control signal was previously discussed.

In view of this identified disclosure, it is clear that applicant has disclosed the nature of the two states and upon what condition the terminal is changed from the first state to the second state, i.e., that applicant had possession of the claimed invention at the time of filing the application. Thus, the specification is commensurate with the claimed invention and is this recitation is clear, i.e., is definite under 112, second paragraph. Withdrawal of the rejections under 112, first and second paragraphs is therefore solicited.

Recitation c)

Recitation c) is: "means for transmitting a state switching notification signal to a sender of said download start control signal if the state of the terminal is changed to the download state".

See that Figures 1-3 illustrate the terminal and center being in bi-directional communication. Figures 4-5 illustrate a radio section 13 and a line section 18.

One of skill would understand that the terminal can send a transmission to the center using the radio section or the line section.

One of skill would also understand that the transmission could include "a state switching notification signal" of desired/appropriate form. Thus, the basis of the 112 rejections would be in the condition language of the recitation, i.e., "if the state of the terminal is changed to the download state".

From the above discussions, the state of the terminal would be changed to the download state (from the first ordinary operation state to the second download state) if the previously received signal from the center was a download start control signal.

Again, see specification page 4, lines 8 *et seq.* "If the signal from the center 1 is coincident with the download start control signal registered in advance, the terminal 4, 11 or 7 judges that the signal from the center 1 is a download start control signal. Accordingly, the terminal 4, 11 or 7 starts a software stored in the memory 16 for switching the state of the terminal to a download state."

One of skill would understand that this stored software for switching that state of the terminal to the download state would accomplish the recited action of changing the terminal to the download state. Upon completing the change to the download

state, the condition "if" requirement of recitation c) is satisfied and the radio section or line section transmits a state switching notification signal to the center (a sender of said download start control signal) as the state of the terminal has been changed to the download state. This action is disclosed as a state switching end notification.

At line 13 of specification page 4, there is specific disclosure concerning sending a state switching end notification. That is, the disclosure is that "[w]hen switching to the downloadable state is completed, the terminal 4, 11 or 7 reads a state switching end notification signal from the memory 16 and notifies the state switching end notification signal to the center 1 from the radio section 13 or the line section 18 through the network 2." Here the term "notifies" would be understood to mean transmit (as recited by recitation c)).

A specific concrete embodiment is disclosed beginning at line 23 of specification page 4.

In this disclosure section, there is disclosed that a method in which a download start control signal and a state switching end notification signal are **set as sub-addresses**. The sub-address is defined as meaning "a signal representing additional information transmitted together with telephone number information".

See the passage beginning with the last line of specification page 4:

The terminal 4, 11 or 7 registers a sub-address "000" as the download start control signal and a sub-address "999" as the state switching end notification signal in the memory 16. To execute downloading, the center 1 calls a terminal 4, 11 or 7 through the network 2 and transmits the sub-address "000" to the terminal 4, 11 or 7. The terminal 4, 11 or 7 receives the sub-address "000" at radio section 13 or the line section 18. The control section 14 compares the received sub-address with the sub-address registered with the memory in advance. As a result of the comparison, since the received sub-address "000" is coincident with the download start control sub-address "000", the terminal 4, 11 or 7 judges that the sub-address transmitted from the center 1 is a request to switch the state of the terminal to the download state. Next, the terminal 4, 11 or 7 starts a software for switching the state of the terminal to the download state from the memory 16. As soon as the switching of the state is completed, the terminal 4, 11 or 7 calls the center 1, reads the sub-address "999" indicating state switching completion from the memory 17 and transmits the sub-address "999" thus read to the center 1. When receiving the sub-address "999", the center 1 judges that the terminal 4, 11 or 7 is completed with switch to the download state, and starts transmitting software or data to the terminal 4, 11 or 7. The terminal 4, 11 or 7 downloads the software or the data transmitted from the center 1 and stores the software or the data in the memory 16.

Thus, it is clear that applicant has clearly disclosed the invention and an example of how to make/execute the functional language, i.e., that applicant had possession of the claimed invention at the time of filing the application.

Applicant has further disclosed alternative approaches to accomplish the recited functions (the paragraph spanning specification pages 5-6):

In the above-stated embodiment, the sub-addresses are the download start control signal and the state switching end notification signal, respectively.

Alternatively, a PB (Push Button) tone, UUI (User-to user Information) or the like may be used as a download start control signal and a state switching end notification signal. The PB tone means herein the tone of the button, which has been depressed, of the terminal. The UUI means herein a function for exchanging short messages of 128 octets (bytes) or less between users using an ISDN D channel.

Thus, it is clear that applicant has clearly disclosed the invention and an example of how to make/execute the functional language.

In view of this further identified disclosure, it is clear that applicant has disclosed how to transmit a state switching notification signal if the state of the terminal is changed to the download state. Thus, the specification is commensurate with the claimed invention and this recitation is clear, i.e., is definite under 112, second paragraph. Withdrawal of the rejections under 112, first and second paragraphs is therefore solicited as to recitation c).

Having addressed each of recitations a), b), and c), it is believed clear that both 112, first and second paragraphs have been satisfied in that it is clear that applicant had possession of the claimed invention at the time of filing the application and that the claims are definite. Reconsideration and withdrawal of these rejections are respectfully requested.

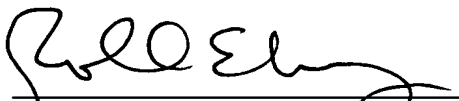
If there should be any remaining questions, it is requested that the undersigned attorney be telephonically contacted.

Allowance of all the pending claims is requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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